

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A semiconductor device, comprising:

a diode, including:

an insulating substrate;

a p-type silicon layer, the p-type silicon layer containing germanium germanium, and being disposed on the insulating substrate; and

an n-type silicon layer junctioned-joined to the p-type silicon layer and the n-type silicon layer being disposed on the insulating substrate.

2. (Currently Amended) A semiconductor device, comprising:

a diode, including:

an insulating substrate;

a p-type silicon layer junctioned to layer, the p-type silicon layer containing germanium, and being disposed on the insulating substrate; and germanium;

an intrinsic silicon layer junctioned-joined to the p-type silicon layer;

and

a-an n-type silicon layer junctioned-joined to the intrinsic silicon layer.layer.

the p-type silicon layer, the intrinsic silicon layer and the n-type silicon layer
being disposed on the insulating substrate.

3. (Canceled)

4. (Original) The semiconductor device according to claim 1, having a plurality of diodes, and further comprising:

a bridge-rectifier circuit comprising the diodes, and rectifying a predetermined alternating-current voltage to a direct-current voltage.

5. (Original) The semiconductor device according to claim 4, comprising:
a coil antenna coupled to one side of the bridge-rectifier circuit; and
a smoothing capacitor coupled to the other side of the bridge-rectifier circuit,
the coil antenna generating an alternating-current voltage by electromagnetic induction;

the bridge-rectifier circuit rectifying the alternating-current voltage supplied thereto into a direct-current voltage; and

the smoothing capacitor smoothing the direct-current voltage supplied thereto into a constant voltage.

6. (Currently Amended) A method of manufacturing a semiconductor device with a diode having an insulating substrate; a p-type silicon layer, the p-type silicon layer containing germanium, and the p-type silicon layer being disposed on the insulating substrate; and a n-type silicon layer junctioned-joined to the p-type silicon layer-layer, and the n-type silicon layer being disposed on the insulating substrate, comprising:

forming a silicon-germanium mixed crystal by implanting germanium to the p-type silicon layer.

7. (Canceled)

8. (Original) The semiconductor device according to claim 2, having a plurality of diodes, and further comprising:

a bridge-rectifier circuit comprising the diodes, and rectifying a predetermined alternating-current voltage to a direct-current voltage.

9.-11. (Canceled)